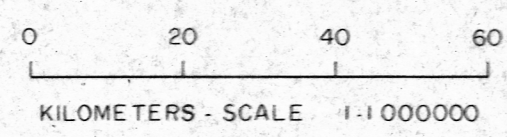
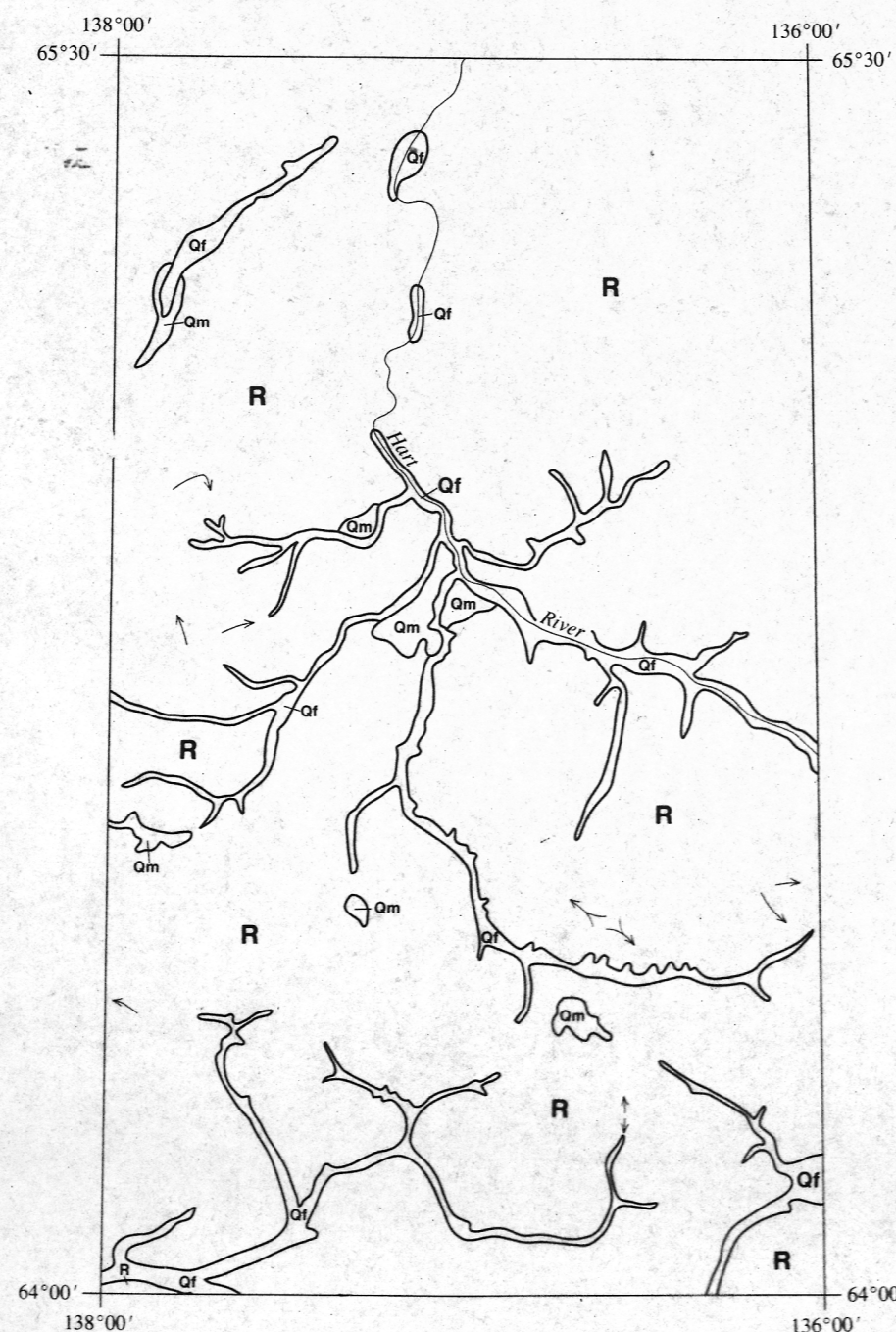
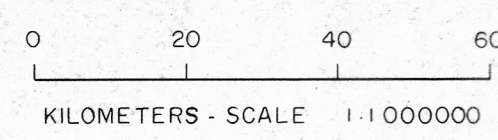


REGIONAL TREND MAP



SURFICIAL GEOLOGY

- QM** Glacial moraine; mostly till, minor silt, sand and gravel
- QF** Fluvial deposits; silt, sand and gravel
- R** Bedrock, mostly uncovered

SYMBOLS

Direction of ice flow

Sources of information:

Hughes, O.L., Rampton, V.N., Bamber, E.W., Mountjoy, E.W., Norford, B.S., Norris, A.W., Norris, D.K., Price, R.A., Proctor, R.M. and Taylor, G.C. 1971. Surficial Geology, Northern Yukon Territory and Northwestern District of Mackenzie. Geological Survey of Canada, Map 1319A, Scale 1:500,000.

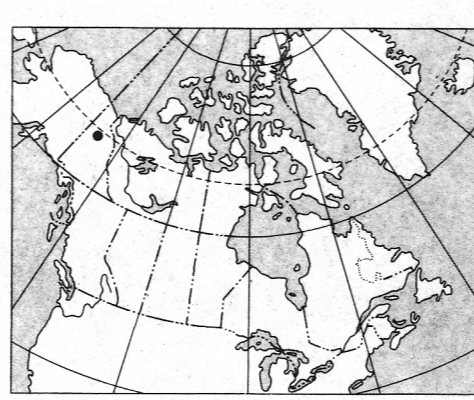
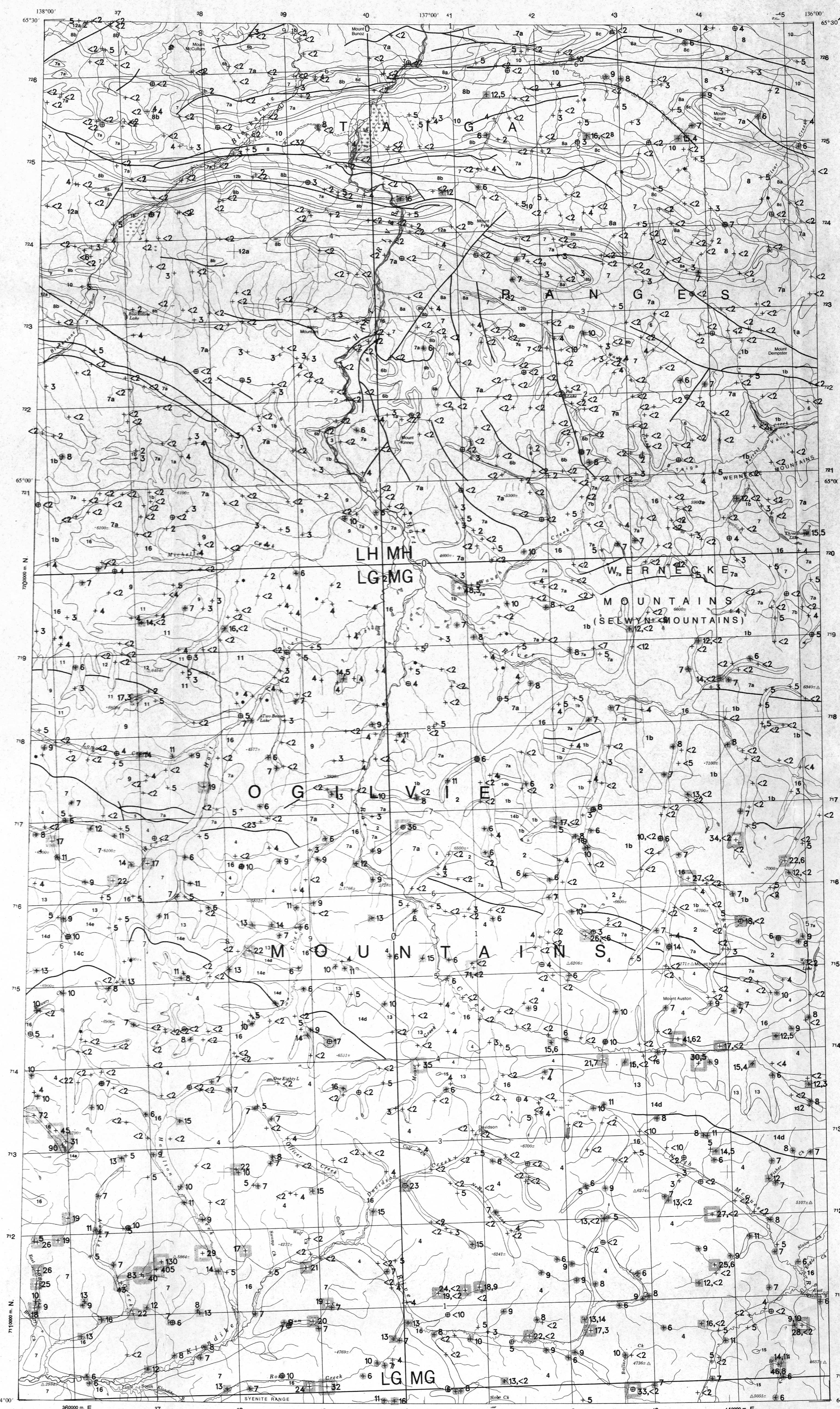
Vernon, P. and Hughes, O.L. 1965. Surficial Geology, Larsen Creek, Yukon Territory. Geological Survey of Canada Map 1171A, Scale 1:253,440.

**GEOLOGICAL SURVEY OF CANADA
MINERAL RESOURCES DIVISION
EXPLORATION GEOCHEMISTRY SUBDIVISION**

CONTRACTORS

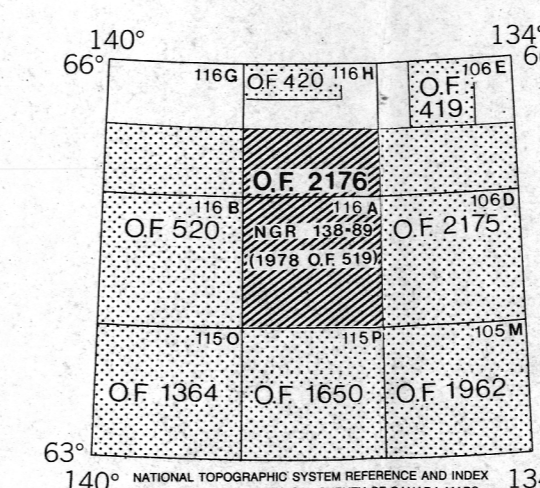
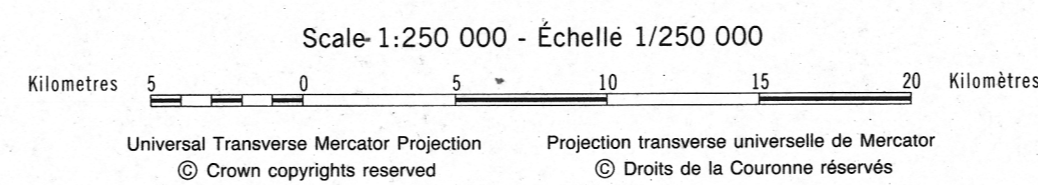
- Collection:** Stokes Exploration Management Ltd. Vancouver, British Columbia
 - Preparation:** Golder Associates Ottawa, Ontario
 - Sediment Re-analysis (1989):** Bondar-Clegg & Co. Ltd. Ottawa, Ontario
 - Sediment Analysis (1977):** Chemex Labs Ltd. North Vancouver, British Columbia
 - Atomic Energy of Canada Ltd.** Ottawa, Ontario
 - Cartography:** Les Services Cartographiques 2 + 1 Inc. Gatineau, Quebec
 - Water Analysis (1977):** Bondar-Clegg & Co. Ltd. Whitehorse, Yukon
 - Reproduction:** Ashley Reproductions Ltd. Ottawa, Ontario
- Copies of the Open File are available from:
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Contribution to the Canada/Yukon Economic Development Program 1989-1990.
Contribution au Programme Canada-Yukon sur le développement économique 1989-1990.



**GOLD (ppb)
STREAM SEDIMENTS**
GSC OPEN FILE 2176
NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 138-89
CANADA - YUKON
ECONOMIC DEVELOPMENT PROGRAM.
(1989-1990)

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
NORTH CENTRAL YUKON, 1989



LEGEND

- QUATERNARY**
 - 16 Unconsolidated glacial and alluvial deposits
- TERTIARY**
 - 15 Quartz porphyry
- CRETACEOUS**
 - 14 Biotite granodiorite and quartz monzonite; 14a, hornblende/biotite syenite and minor diorite; 14b, diorite and gabbro; 14c, green and maroon shale and brown siltstone; 14d, Keno Hill quartzite and minor shale and phyllite; 14e, quartzite, graphitic and chloritic slate and phyllite; minor limestone; 14f, similar to 14d but may be older.
- JURASSIC**
 - 13 Lower Schist division: argillite, slate, phyllite and quartzite
- PERMIAN**
 - 12 Tahkandit Formation: chert, cherty limestone and limestone; 12a, undivided clastics and carbonates; 12b, Jungle Creek Formation: shale
- PERMIAN AND CARBONIFEROUS**
 - 11 Limestone, black shale, chert and chert-pebble conglomerate; 11a, dark shale, limestone, sandstone, minor conglomerate; 11b, shale, slate, minor limestone and sandstone.
- CARBONIFEROUS**
 - 10 Hart River Formation: siltstone, shale and limestone.
- DEVONIAN TO CARBONIFEROUS**
 - 9 Black shale, argillite, slate, limestone, chert, conglomerate and quartzite; 9a, Nation River Formation: chert-pebble conglomerate and sandstone.
- DEVONIAN**
 - 8 Undivided clastics; 8a, Canal Formation: black siliceous shale; 8b, Ogilvie Formation: limestone, 8c, Cranwick Formation: limestone; 8d, Michelle Formation: limestone and shale.
- CAMBRIAN, ORDOVICIAN AND SILURIAN**
 - 7 Road River Formation: shale and limestone; 7a, unnamed carbonates, 7b, dark volcanic rocks, tuff, argillite and limestone; 7c, carbonate debris flow.
- CAMBRIAN**
 - 6 Unnamed clastics; 6a, unnamed carbonates and clastics; 6b, unnamed carbonates and clastics.
- PRECAMBRIAN AND/OR LATER**
 - 5 Dark green volcanic rocks, breccia, tuff and agglomerate; minor shale, chert, siltstone and limestone; 5a, dark green volcanic rocks, breccia, tuff and agglomerate; 5b, dark green andesite.
 - 4 Quartzite, sandstone, quartz-pebble conglomerate, shale and slate; quartz-chlorite schist, quartz-mica schist and phyllite; minor limestone and chert; 4a, limestone.
- HELIKIAN**
 - 3 Unnamed carbonates, shale and gypsum.
- HADRYNIAN AND HELIKIAN**
 - 2 Orange-weathering dolomite, slate, minor phyllite and quartzite; 2a, pink-, orange- and grey-weathering dolomite, shale, quartzite, conglomerate and limestone; 2b, buff and orange dolomite, slate, quartzite, limestone and conglomerate; 2c, grey dolomite, shale and quartzite; 2d, dolomite-boulder conglomerate; 2e, shale, argillite, siltstone and dolomite.
- HELIKIAN AND (?) APHEBIAN**
 - 1 Unnamed orange dolomite; 1a, unnamed orange and grey dolomite; 1b, phyllitic argillites and quartzite; minor slate, dolomite and conglomerate.

SYMBOLS

- Geological boundary
- Fault
- No data
- Single analysis +27
- Repeat analysis +27, 14
- Single analysis, less than detection limit +1
- Field duplicate site *

The legend modified and geology derived for this geochemical map from G.S.C. map 1283A and Open File 279.

**Gold-INA
IN
Stream Sediment**

- ppb 405 - MAX
- 26 - 98
- 16 - 95
- 11 - 90
- 5 - 70
- <detection - MIN
- 1200 SAMPLES

Elevation in feet above mean sea level

Magnetic declination in 1990 for the central part of the map area (64°45'N; 137°E) is 31°39'E decreasing 11.3' annually. Magnetic declination ranges from 30°42'E decreasing 10.9' annually in the southwest corner of the map area, to 32°40'E decreasing 11.8' annually, in the northeast corner of the map area.